

REMARKS

In response to an Office Action mailed on October 27, 2006, Applicant respectfully requests that the Application be reconsidered. No claims are amended. Nineteen claims are presented for examination. Of these, claims 1, 8 and 16 are independent, and the remaining claims are dependent.

The Applicant appreciates the time and courtesy extended by the Examiner to the undersigned during a telephonic interview on November 15, 2006, during which the following topics were discussed: the art (US Pat. No. 5,426,069 to Selvakumar, *et al.* ("Selvakumar")) cited by the Examiner in the most recent Office Action; the well-known fact that silicon dioxide (SiO₂) is an electrical insulator commonly used in semiconductor devices; and the "polysilicon-based receiving electrode" recited in the claims, as distinct from the teachings of the prior art.

Distinctions over the Cited Art

The Examiner rejected claims 1-3, 5-9, 12-19 and 21-23 under 35 U.S.C. 103(a) as being obvious over by Selvakumar. The Applicant respectfully traverses these rejections. Selvakumar's polysilicon gate does not conduct photogenerated carriers from a photodiode to another component, because Selvakumar's polysilicon gate is electrically insulated from the depletion region by a SiO₂ insulating layer. The Examiner asserted that Selvakumar provides no basis for the conclusion that SiO₂ is an insulator. However, as shown by references (copies of which are attached below, in Appendix A) the Applicant sent to the Examiner on November 3, 2006 via facsimile transmission, it is well-known in the art that SiO₂ is an insulator. In fact, SiO₂ is the most commonly used insulator in semiconductor devices.

In contrast to Selvakumar's teachings, in the present application, the disclosed and claimed "receiving electrode" collects photogenerated carriers (electrons or holes) and conducts these carriers to another component.

No art of record, either alone or in combination, discloses or suggests a light conversion apparatus that includes a polysilicon-based receiving electrode that permits received light to substantially pass through the receiving electrode and is coupled with the photodiode to extract and conduct photogenerated carriers (produced by the photodiode) to another component, as recited in claim 1. (Emphasis added.) For at least this reason, claim 1 is believed to be allowable.

All the other independent claims, i.e. claims 8 and 16, include similar recitations. Thus, claims 8 and 16 are believed be allowable, for at least the reason discussed above with respect to claim 1. Claims 2, 3, 5-7, 9, 12-15, 17- 19 and 21-23 depend directly or indirectly from claim 1, 8 or 16. These dependent claims are, therefore, believed to be allowable, for at least the reasons discussed above, with respect to claim 1.

Finality of Previous Office Action

The Applicant respectfully requests that the finality of the October 27, 2006 Office Action be withdrawn. As discussed during the telephonic examiner interview, the Examiner apparently did not fully appreciate one of the limitations recited in the claims and corresponding distinctions over the prior art made by the Applicant in previous responses to Office Actions, namely that the recited “receiving electrode” conducts photogenerated carriers to another component. The Examiner indicated that a new search may be necessary, now that this distinction is understood.

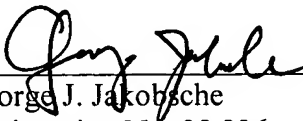
The Applicant respectfully notes that this definition of the receiving electrode, and the corresponding argument distinguishing the claimed invention over the prior art, were provided in previous Responses. For example, in the immediately-previous Response, the Applicant distinguished Selvakumar by noting “The [claimed] receiving electrode collects photogenerated carriers (electrons or holes) produced in the photodiode as a result of light that passes through the electrode and into the photodiode, and the electrode conducts these carriers to another component.” (Applicant Response C, page 8, last paragraph, emphasis added.) In an earlier Response, the term “electrodes” was clearly used to refer to elements that conduct photogenerated carriers. (See, Response B, page 6, paragraph 3.)

Furthermore, the Application makes clear that a “receiving electrode” “transmit[s] the electrical signals produced by a photodiode 14 to other components.” (Application, at least at page 5, lines 12-13 and lines 23-24.) Thus, it is not believed that Applicant’s amendments in the most recent Response necessitated a new ground of rejection, inasmuch as the meaning of “receiving electrode” (with respect to conducting photogenerated carriers) was clear, even prior to the amendments. Withdrawal of the finality of the Office Action is respectfully requested.

Summary

For all the foregoing reasons, it is respectfully submitted that the present Application is in a condition for allowance, and such action is earnestly solicited. Applicant hereby requests that any extension-of-time or other fee required for timely consideration of this application be charged to Deposit Account No. 19-4972. The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present Application.

Respectfully submitted,


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